Inventor: Hildgen, et al Docket No.: 09680.0257USWO

Title: FUNCTIONALIZED POLYMERS AND THEIR BIOMEDICAL AND

PHARMACEUTICAL USES Attorney Name: Gregory A. Sebald Phone No.: (612) 336-4728 Sheet 1 of 5

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POLYLACTIC ACID PLA

$$HO = \begin{bmatrix} H_3C & O & O & O \\ O & CH_3 & M & O \\ O &$$

POLYLACTIC - CO GLYCOLIC ACID PLGA

POLYCAPROLACTONE PCL

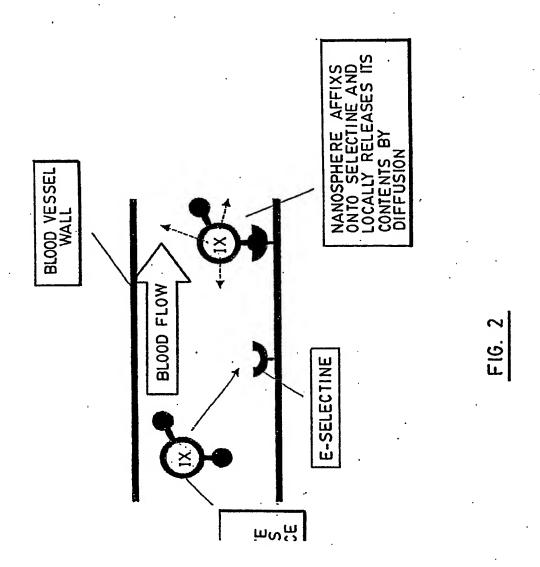
FIG. 1

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## STEP 3

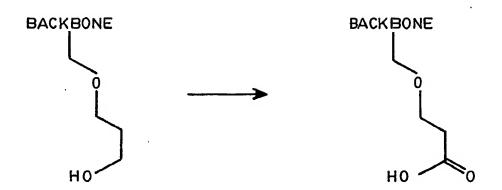


FIG. 3

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$$R = \begin{bmatrix} & & & \\ & & &$$

grafted polymer

FIG. 4

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$$HO \left( \begin{array}{c} CH_3 \\ O \\ CH_3 \\ \end{array} \right) \left( \begin{array}{c} CH_3 \\ O \\$$

Cross-linked polymer

FIG.